



Chicago Flu Update



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News & Updates

The CDC has released [interim influenza vaccine effectiveness estimates](#)¹ for the 2019-2020 season, showing that getting a flu vaccine reduces flu-related doctor's visits by about half overall and by 55% in children. Vaccination is the best way to protect against influenza infection and all Chicagoans six months and older are encouraged to get vaccinated. Chicagoans should ask their healthcare provider or pharmacist about vaccine availability. To locate the closest City of Chicago clinic or retail pharmacy, go to www.chicagoflushots.org. Uninsured or underinsured adults and children 0-18 years old who are uninsured, underinsured, or Medicaid (Title XIX) insured can visit any [CDPH Walk-in Immunization Clinic](#)² to receive the flu vaccine.



What is the risk?

Currently, the risk of influenza infection remains high.

Are severe cases of influenza occurring?

For the week of March 1-7, 2020, 38 influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 29, 2019, 441 influenza-associated ICU hospitalizations have been reported; 339 (77%) were positive for influenza A (8 H3N2, 111 H1N1_{pdm09}, 220 unknown subtype [subtyping not performed or not all subtypes tested]) and 102 (23%) were positive for influenza B. The median age of influenza A cases is 55 years and the median age of influenza B cases is 35.5 years (overall range of 1 month-96 years); three pediatric deaths were reported and 14 outbreaks in long-term care facilities; selected attributes are summarized in Table 1.

Table 1.

Table 1. Selected attributes of influenza-associated intensive care unit hospitalizations reported for Chicago residents during the 2019-2020 season, October-May.

Age Group*	#	% [†]	Sex	#	%
0-4	77	18	Male	227	52
5-17	28	6	Female	213	48
18-24	16	4	Med. Cond./Complication[‡]		
25-49	76	17	Lung Disease	147	33
50-64	126	29	Cardiac Disease	128	29
≥65	117	27	Diabetes	102	23
Race/Ethnicity			Ventilator Support	97	22
NH-White	93	21	Reported Deaths [§]	15	3
NH-Black	238	54	Treatment/Vaccination[†]		
Hispanic	89	20	Reported Antiviral Tx	352	80
Asian/Other	20	5	Reported Flu Shot	133	30

* One patient missing age and race/ethnicity at time of report; † Percentages may not add up to 100 due to rounding; ‡ As reported in INEDSS (Illinois National Electronic Disease Surveillance System); § Date of death occurring within one week of positive influenza test among reported influenza-associated ICU hospitalizations.

Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of March 1-7, 2020, 420 of the 1,743 (24%) specimens tested for influenza were positive; 349 typed as influenza A (0 H3N2, 132 H1N1_{pdm09}, and 217 unknown subtype [subtyping not performed or not all subtypes tested]) and 71 typed as influenza B (Figure 2).

Since September 29, 2019, 6,023 of 31,145 (19%) specimens tested for influenza have been positive; 3,693 (61%) typed as influenza A (59 H3N2, 1,147 H1N1_{pdm09}, and 2,487 unknown subtype [subtyping not performed or not all subtypes tested]) and 2,330 (39%) typed as influenza B. The cumulative number of specimens testing positive for influenza so far this season is higher than last season (9%) but similar to the 2017-2018 season (19%) for the same time period.[§]

Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2019-2020) and previous season (2018-2019), October-May.

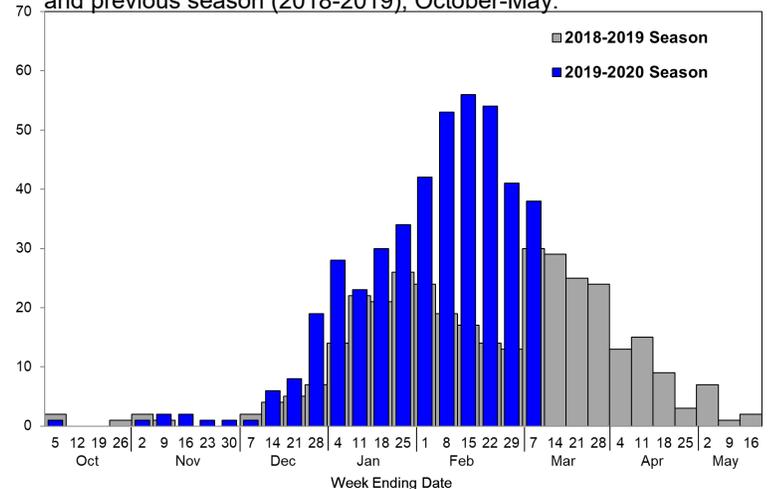
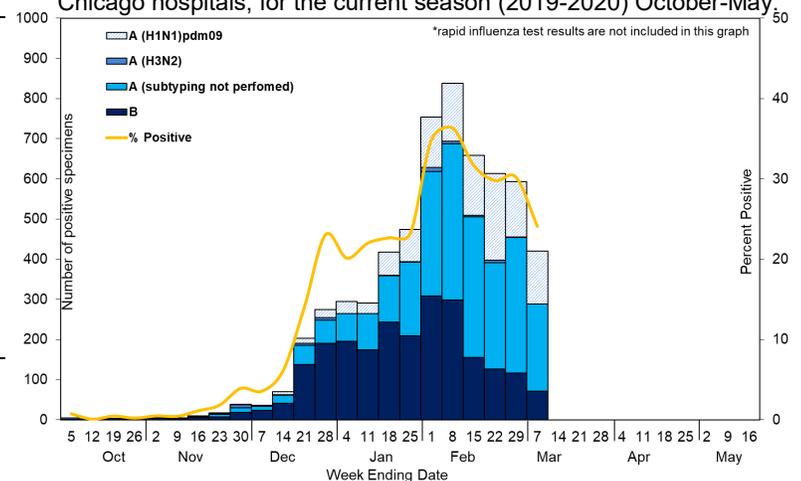


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2019-2020) October-May.



§ Reported percentages represent final end of season data and may differ from previously published reports. All data are preliminary and may change as more reports are received.

¹ https://www.cdc.gov/mmwr/volumes/69/wr/mm6907a1.htm?s_cid=mm6907a1_w;

² https://www.chicago.gov/city/en/depts/cdph/supp_info/health-protection/immunizations_walk-inclinics.html

How much influenza-like illness is occurring?

Several outpatient clinics throughout Chicago participate in CDC's Influenza-like Illness Surveillance Network (ILINet) by reporting on a weekly basis the total number of outpatient clinic visits, and of those visits, the number with influenza-like illness (ILI). For the week of March 1-7, 2020, 215 of the 5,785 (3.7%) reported outpatient clinic visits were due to influenza-like illness, which is higher than the percentage last season for same time period (2.0%) (Figure 3).

In addition to ILINet, ESSENCE is an electronic syndromic surveillance system that utilizes the chief complaints of patients visiting emergency departments to monitor for influenza-like illness. Currently, ESSENCE captures nearly every emergency department visit in the city on a daily basis. For the week of March 1-7, 2020, 1,356 of the 24,580 (5.5%) total emergency department visits were due to influenza-like illness (Figure 4).

Figure 5 represents the percentage of emergency department visits due to influenza-like illness aggregated by patient zip code. For the week of March 1-7, 2020, 50 of 59 (85%) zip codes had moderate to high ILI activity levels; this is higher than last season where 66% of zip codes were at moderate to high levels for the same time period and the thirteenth consecutive week where over half of zip codes had moderate to high ILI activity levels.

Where can I get more information?

The Centers for Disease Control and Prevention's FluView³ report provides national updates and trends related to the intensity of influenza activity across the United States, as well as detailed information on antiviral resistance, severity of illness, and other topics. Updates specific to Illinois⁴ and Suburban Cook County⁵ are also available online. Current and archived issues of the Chicago Flu Update can be found on the CDPH website section Current Flu Situation in Chicago⁶.

Reporting Information

Illinois Department of Public Health recently issued Influenza Testing and Reporting Guidance⁷. The Chicago Department of Public Health has previously issued guidance on reporting influenza-associated ICU hospitalizations⁸. Healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS)⁹. For more information contact: SyndromicSurveillance@cityofchicago.org

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Figure 3. Percent of medically-attended outpatient visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week for the current season (2019-2020) and previous two seasons, October-May.

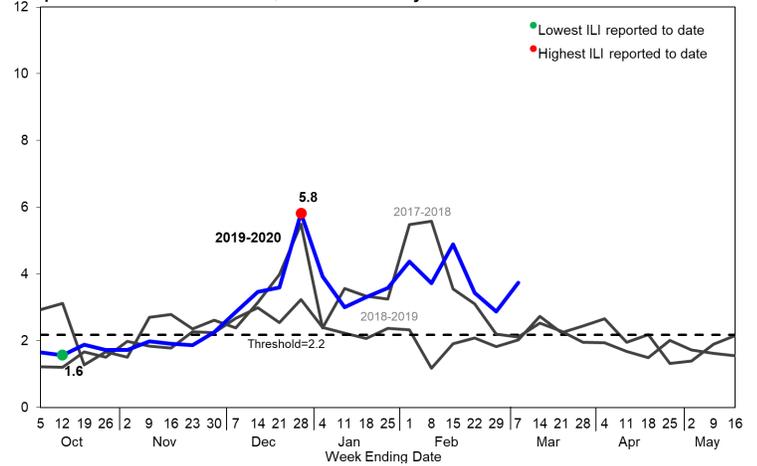


Figure 4. Percent of emergency department visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to ESSENCE, Chicago, by week, for the current season (2019-2020) and previous two seasons, October-May.

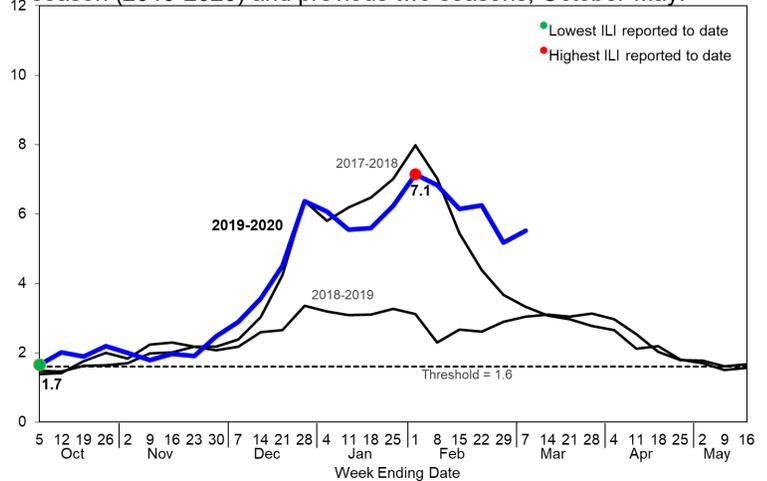
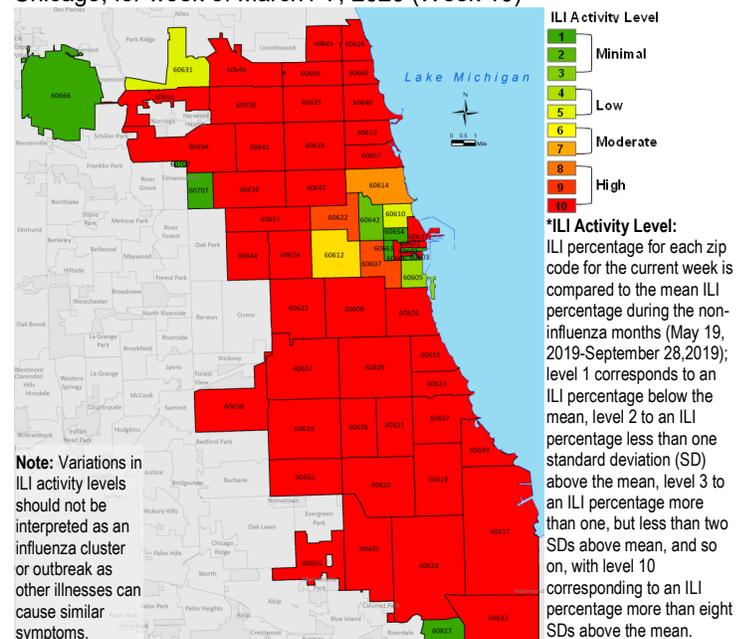


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to ESSENCE, Chicago, for week of March 1-7, 2020 (Week 10)



All data are preliminary and may change as more reports are received.

³ <http://www.cdc.gov/flu/weekly/index.htm>, ⁴ <http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/influenza-surveillance>, ⁵ <https://ccdphcd.shinyapps.io/influenza/>;

⁶ https://www.chicago.gov/city/en/depts/cdph/supp_info/health-protection/current_flu_situationinchicago.html;

⁷ www.dph.illinois.gov/sites/default/files/publications/20190916idphohp-annual-flu-testing.pdf ;

⁸ <https://www.chicagohan.org/documents/14171/39923/Reporting+Influenza-Associated+ICU+Hospitalizations/bc2f49b2-cf74-487c-9441-0b0a930e4b41>; ⁹ <httpsdph.partner.illinois.gov/>